







Includes Easily remove membrane built-in test membrane after test



Standard flexible stopper prevents stubbing of toe or breakage of stopper stem.







Repairs can easily made from inside tub by simply removing three screws and replacing old cable.



For More Information Contact:

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# Innovator® Cable

928-CA Innovator® CableFlex™ 970-CA Innovator® Cable 971-CA Half Kit

For most tubs up to 16" deep; 21" cable

938-CA Innovator® CableFlex™ 980-CA Innovator® Cable 981-CA Half Kit

For most tubs up to 24" deep; 34" cable

948-CA Innovator® CableFlex™ 990-CA Innovator® Cable 991-CA Half Kit

For most tubs up to 36" deep; 48" cable **SPECIFICATIONS** 

### **FEATURES:**

- · Fully repairable from inside the tub.
- · Fully-testable cable bath waste; test plug included
- Installs in minutes, like the Innovator<sup>®</sup>.
- ADA Handle and theft-resistant device options available.
- Self-centering; self-aligning.
- Positive mechanical stop stays open in deep water.
- Flexible stopper; no stubbed toes.

### **APPROVALS:**

- Non-corrugated, flexible PVC tubing.
- Manufactured in compliance with ASME A112.18.2-2005/ CSA B125.2-05.
- IAPMO approved
- CSA approved

## PATENTS (INNOVATOR®):

- U.S. Pat. Numbers 5,890,241; 6,637,050; 6,675,406; 7,127,752; and Patents Pending
- Canadian Patent Number 2.437.448
- Mexican Patent Numbers PA/a/2003007344 and patents pending.

## **PATENTS (Flexible Waste Pipe Assembly):**

- U.S. Patents Pending
- Mexican Patent Number PA/a/2005011301

### **THREAD SIZE:**

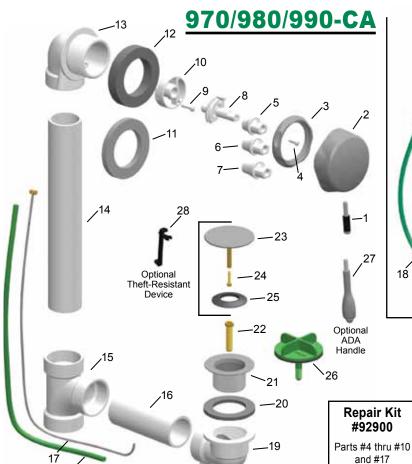
- 1¹/2" 11¹/2 NPSM (Coarse Thread)
- 1.865" Major Diameter (outside thread diameter)
- 11.5 threads per inch

#### **PIPING/FITTINGS:**

- 928/938/948 available in PVC only
- 970/980/990 and 971/981/991 available in ABS and PVC

# **NEW!** Innovator® Testable Cable

Innovator® Cable Flex™ • Innovator® Cable





# Innovator® Cable Half Kits: 971/981/991-CA

Parts #1 thru #13 and #17 thru #27

# **Optional Features:**

#27 92874-\_\* ADA Handle #28 01076.....Theft-Resistant Device

ITEM PART# DESCRIPTION LIST I	PRICE ITEM	PART#	DESCRIPTION	LIST PRICE
1. 01032*Cable Faceplate Screw, 1/4-20x1-3/4	15.		1-1/2" Schedule 40 Sanitary To	
with Screw Guide			1-1/2" Schedule 40 Sanitary To	
2. 01019*Cable Faceplate	16.		ABS-4.625Schedule 40 Pipe,	
3. 01047*Cable Overflow Elbow Retainer Nut			PVC-4.625Schedule 40 Pipe,	
4. 01037Cable Adapter-to-Drive Shaft Screw, #8x5/8	3		ABS-11.75Schedule 40 Pipe,	
5. 01071Cable Faceplate Adapter - Thin			PVC-11.75Schedule 40 Pipe,	
6. 01072Cable Faceplate Adapter - Medium			ABS-11.75Schedule 40 Pipe, PVC-11.75Schedule 40 Pipe,	
7. 01073Cable Faceplate Adapter - Thick	17.	20151	Cable Core	
8. 20145Cable Drive Shaft	18.	20161	Cable Conduit	
9. 01036Cable Retainer-to-Overflow Elbow Screw #	3x7/8 19.	11016	1-1/2" Schedule 40 Cable Drai	in Elbow, ABS
10. 20146Cable Retainer		14016	1-1/2" Schedule 40 Cable Drai	in Elbow, PVC
11. 10694Overflow Elbow Gasket Half Height	20.	10696	Drain Elbow Gasket	
12. 10675Overflow Elbow Gasket	21.	01016*	Strainer Body, Brass, 1.865" -	11.5x1.25"
13. 110291-1/2" Schedule 40 Cable OF Elbow, ABS	22.	20147	Cable Core Guide	
140291-1/2" Schedule 40 Cable OF Elbow, PVC	23.		Cable Stopper Assembly – inc	cludes the following:
14. <b>970:</b> SCHABS-11.75Sch 40 Pipe, ABS, 1.5" x 11.75"			9 Stopper Adjusting Screw	
<b>970:</b> SCHPVC-11.75Sch 40 Pipe, PVC, 1.5" x 11.75"			'Stopper Seal, 1-1/16"	aaltat
<b>980:</b> SCHABS-20.25Sch 40 Pipe, ABS, 1.5" x 20.25	)		Test Plug with O-Ring-Type G	askei
<b>980:</b> SCHPVC-20.25Sch 40 Pipe, PVC, 1.5" x 20.25	07	IONAL:	· ADA Hamalla anal Hamella Oat C	<b>\</b>
990: SCHABS-32.00Sch 40 Pipe, ABS, 1.5" x 32.00	' I		ADA Handle and Handle Set S	ocrew
990: SCHPVC-32.00Sch 40 Pipe, PVC, 1.5" x 32.00	28.	010/6	Cable Theft-Resistant Device	
* Please indicate desired finish.	'			



# **WATCO MANUFACTURING COMPANY**

# **Instructions for Installing Watco Innovator® Cable Bath Wastes**

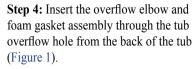
Models: Watco CableFlex<sup>TM</sup>: 928, 938, 948 - Watco Cable: 970, 980, 990 - Half Kits: 971, 981, 991



Step 1: Cut the 1½" Schedule 40 (or Flexible PVC) overflow pipe and drain pipe (*Items 14 and 16*) to the desired lengths to fit the tub.

Step 2: Using standard solvent cement procedures, assemble the bath drain pipe and fittings (*Items 13-16, and 19*). DO NOT LET SOLVENT CEMENT FLOW INSIDE THE OVERFLOW OR DRAIN ELBOWS PAST THE SOCKET! Any excess glue will prevent the bath waste from operating.

> Step 3: Place the thick foam gasket (*Item 12*) onto the overflow elbow (*Item 13*). The testing membrane will still be attached. Thick-walled tubs will require the thin gasket (Item 11).











**Step 5:** Screw on the overflow elbow (OE) nut (*Item 3*) from inside of the tub (Figure 2). HAND TIGHTEN ONLY until the nut is snug and the gasket is only slightly compressed against the back of the tub. You must get a minimum of 1½ turns when installing the nut. If there are not enough threads sticking through the tub to get the nut installed, remove the thick gasket (Item 12) and replace it with the thin gasket (Item 11).



Step 6: Secure the drain elbow (Item 19) and drain flange gasket (Item 20) under the tub by screwing in the strainer body (Item 21) through the tub drain hole from inside the tub (Figures 3 and 4). If desired, a putty or sealant may be used between the flange of the strainer body and the tub. CAUTION: Do not use linseed oil based putty products. Use only thread compounds specifically intended either for ABS or PVC assembly.







# If the bath waste will not be pressure tested, skip to step 8.

Step 7: Screw the strainer test plug (*Item 26*) into the strainer body *Item 21*) and test the system (Figure 5).



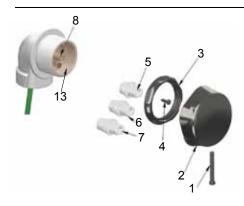
**Step 8:** After the pressure testing is complete, remove the test plug (Item 26). Cut away and discard the orange test membrane from the overflow elbow (Figure 6). Use caution not to damage internal parts on the inside of the overflow elbow.



Continued next page.

# Watco Innovator® Cable Bath Wastes

## **Installation Instructions Continued**



**Step 9:** Select the faceplate adapter (*Item 5, 6, or 7*) that leaves the desired gap between the tub wall and the edge of the faceplate (*Item 2*). (See included adapter selection instruction sheet.)

Place adapter onto the drive shaft (*Item 8*) (Figure 7). <u>If you have selected an adapter that is too short, the spacer tabs on the inside of the faceplate will rub on the OE nut (*Item 3*), and the adapter screw hole will not line up with the faceplate screw hole.</u>

Once the desired faceplate adapter is determined, secure the faceplate adapter to the drive shaft using the screw provided (*Item 4*) (Figure 8).







Secure the faceplate (*Item 2*) to the faceplate adapter (Figure 9) using <u>either</u> the faceplate screw (*Item 1*) (Figure 10). (Leave the plastic sleeve on threads to help align the screw.)

or the optional ADA handle.





Tighten the faceplate screw until it is flush with the faceplate and snug (or if using the handle, until it is snug). DO NOT OVERTIGHTEN.





Step 10: Rotate the faceplate CLOCKWISE to the fully-closed position. Install the core guide (*Item 22*) into the strainer body using a screwdriver or 7/16" socket (Figure 11). (See core guide instruction card included with kit.) The core guide should be screwed in until it is snug against the bottom of the drain elbow. Insert the stopper (*Item 24*) into the core guide (*Item 22*) (Figure 12).

**Step 11:** Test the cable unit for proper operation. In the fully-closed position, with the faceplate (*Item 2*) rotated clockwise, the stopper (*Item 25*) should rest and seal on the strainer body flange. In the fully-open position, with the faceplate (*Item 2*) rotated

counterclockwise <u>past the click</u>, the stopper should open to a height of ½" - ¾" above the strainer body flange. The plastic cable core should move freely inside the core guide (*Item 22*) when the faceplate is turned. Adjustments to the open height can be made using the stopper adjustment screw (*Item 24*).



Figure 12

## If installing the Theft-Resistant Option:



**Step 1:** Remove stopper seal.



**Step 2:** Slide Theft-Resistant device into stopper slot.



**Step 3:** Replace stopper seal.

**Step 4:** Insert stopper shaft into strainer body, pushing it in until the hook on the Theft-Resistant device snaps into place under the strainer body.



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